

United States of America  
Department of Transportation — Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SA1186NW

*This certificate, issued to* Maynard C. Crosby

*certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 23 of the Federal Aviation Regulations, dated February 1, 1965, and amendments 23-1 through 23-8.*

*Original Product — Type Certificate Number:* A16EA

*Make:* Gulfstream American

*Model:* AA-5\* and AA-5A

*Description of Type Design Change:* Installation of a Lycoming O-360-A4K engine, a McCauley 1A170FFA/7563 or a Sensenich 76EM8S10-0-60 through -65 propeller and associated systems in accordance with FAA approved Ameromod Corporation Installation Instructions AM-100, or later FAA approved revision.

NOTE: The engine mount, controls induction system, and the spinner are the same as those in the Model AA-5B.

\*AA-5 models are limited to the 1975 model or those 1972-1974 AA-5 models that have been updated to the 1975 model.

*Limitations and Conditions:* Approval of this change in type design applies to the above model aircraft only. This approval should not be extended to aircraft of this model on which other previously approved modifications are incorporated unless it is determined that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse affect upon the airworthiness of that aircraft. A copy of this Certificate and Addendum SA1186NW shall be maintained as part of the permanent records for the modified aircraft.

*This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.*

*Date of application:* February 19, 1981

*Date issued:* April 29, 1991

*Date of issuance:* February 20, 1981

*Date amended:* April 27, 1981; April 29, 1991

*By direction of the Administrator*

*David G. Hume*  
(Signature)

Manager, Aircraft Modification Branch  
Seattle Aircraft Certification Office

(Title)



Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

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**Supplemental Type Certificate**  
(Continuation Sheet)

*Number* SA1186NM

SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SA1186NW

The conditions and limitations of the original specifications apply except as follows:

This Addendum, which is part of Supplemental Type Certificate No. SA1186NW, prescribes the conditions and limitations under which the STC was issued and meets the airworthiness requirements of the Federal Aviation Regulation 23.

SUPPLEMENTAL TYPE CERTIFICATE HOLDER: Maynard C. Crosby

1. MODEL AA-5 & AA-5A (NORMAL/UTILITY CATEGORY) AS MODIFIED BY STC SA1186NW

Engine: Lycoming O-360-A4K  
Fuel: 100/130 minimum grade aviation gasoline  
Capacity: 37 gallons useable (AA-5)  
51 gallons useable (AA-5A)

Engine Limits: For all operations: 2700 rpm (180 Hp)  
Propeller and  
Propeller Limits:

1. Sensenich 76EM8S10-0-60 through -65  
Diameter: 76" maximum; 76" minimum  
Placards: None  
Static rpm:

PITCH	MAXIMUM	MINIMUM
-60	2350	2200
-61	2325	2175
-62	2300	2150
-63	2275	2125
-64	2250	2100
-65	2225	2075

2. McCauley 1A170FFA/7653  
Diameter: 75" maximum; 74½" minimum  
Placards: AVOID CONTINUOUS OPERATION BETWEEN  
1850 AND 2250 RPM WHILE DESCENDING  
Static rpm: 2300 rpm max.; 2150 rpm min.

C. G. Range: Same as Type Certificate Data Sheet No. A16EA

Maximum Weight: 2200 pounds (Same AS TCDS A16EA)  
2400 pounds (with AA-5B center spar) (Refer to  
Ameromod Corporation Installation Instruction  
AM-100, DETAILED PROCEDURES, Paragraph B.)

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NOTE 1: Current weight and balance report including list of equipment in the certified empty weight must be in the aircraft.

NOTE 2: In addition to the Placards and Markings required by Type Certificate Data Sheet A16EA, Note 2, apply the following:

a. Adjacent to the fuel filler cap:

CAUTION  
USE 100/130 OCTANE  
FUEL OR HIGHER ONLY

b. In full view of the pilot on the instrument panel:

NOTICE  
AIRCRAFT MODIFIED WITH LYCOMING O-360-A4K ENGINE  
(180 HP @ 2700 RPM). CONSULT AA-5B OPERATOR'S  
HANDBOOK FOR PERFORMANCE DATA

NOTE 3: With the described engine and propeller installation, performance will be at least equal to or better than that given in the original FAA Approved Airplane Flight Manuals for the Gulfstream American (Grumman) AA-5A airplane. (Performance data, EXCEPT for the range information, is similar to the model AA-5B airplane. Consult the Operator's Handbook for the AA-5B for takeoff, climb, and cruise information.)

- END -

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